

NASA Case Study Epilogue

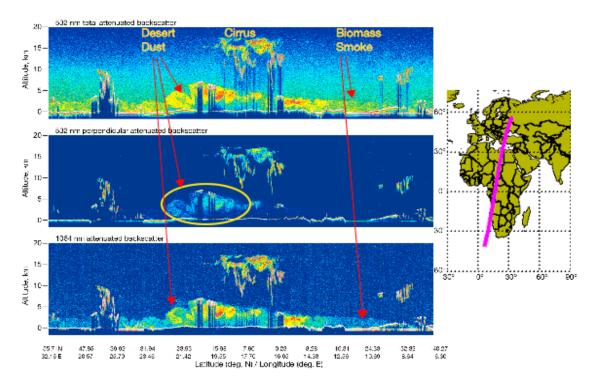
GSFC-1011E-1

THE CALIPSO MISSION Project Management in the "PI Mode": Who's in Charge?

CALIPSO was carried into orbit on April 28, 2006, aboard a *Delta II* rocket, after an October 2005 launch date was postponed due to a labor strike and concerns over flight readiness of the launch vehicle. CALIPSO was launched from Vandenberg Air Force Base in a dual-payload configuration with the CloudSat satellite. It flies in formation with the EOS Aqua satellite as part of the Aqua constellation, known as the A-train. (The Aqua satellite was launched in May 2002, and the Aura and PARASOL satellites were launched in 2004.) The launch of CALIPSO and CloudSat completed the five-satellite A-train constellation.

A year after launch, *CALIPSO* was conducting "pioneering observations of unprecedented resolution," according to Program Executive Steve Volz, and had delivered more than 98% of all available science observations with no instrument-related measurement difficulties.

CALIPSO GSFC-1011E-1



An example cross-section of CALIPSO lidar observations acquired on June 9, 2006, across eastern Europe and Africa shown by the track on the map. The upper and lower panels display the total attenuated lidar backscatter at wavelengths of 532 nanometers and 1,064 nanometers, respectively. The middle panel displays the orthogonal component at 532 nanometers. This example illustrates how measurements from CALIPSO's three channels provide the complementary information needed to characterize the vertical structure and properties of aerosol layers and clouds. NASA image